

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 98-003-E - ORDER NO. 98-383

JUNE 1, 1998

IN RE: Annual Review of Base Rates for Fuel Costs     )  
          of Duke Power Company.                             )  
   ) ORDER APPROVING  
   ) BASE RATES FOR  
   ) FUEL COSTS

On May 14, 1998, the Public Service Commission of South Carolina (the Commission) held a public hearing on the issue of the recovery of the costs of fuel used in electric generation by Duke Power, a division of Duke Energy Corporation (Duke or the Company), to provide service to its South Carolina retail customers. The procedure followed by the Commission is set forth in S.C. Code Ann. Section 58-27-865 (Supp. 1997). The review in this case uses the actual fuel revenues and expenses from April 1997 through March 1998 to determine an appropriate fuel factor for the period of June 1, 1998 through May 31, 1999.

At the public hearing, William F. Austin, Esquire and William Larry Porter, Esquire, represented the Company; Nancy V. Coombs, Esquire and Hana Pokorna-Williamson, Esquire, represented the Intervenor, the Consumer Advocate for the State of South Carolina (the Consumer Advocate); and F. David Butler, General Counsel, represented the Commission Staff. The record before the Commission consists of the testimony of two witnesses on behalf of the Company, two witnesses on behalf of the Commission Staff, and seven (7) hearing exhibits.

Based upon the evidence of the record, the Commission makes the following findings of fact and conclusions of law:

**FINDINGS OF FACT**

1. The record of this proceeding indicates that for the period from April 1997 through March 1988, the Company's actual total fuel costs for its electric operations amounted to \$701,935,260. Composite-Hearing Exhibit No. 6, Accounting Exhibit E.

2. Staff reviewed and compiled a percentage generation mix statistic sheet for the Company's fossil, nuclear and hydro-electric plants for April 1997 through March 1998. The fossil generation ranged from a high of 65% in October 1997 to a low of 42% in February 1998. The nuclear generation ranged from a high of 52% in February 1998 to a low of 35% in October and December 1997. The percentage of generation by hydro ranged from 0% to 6% for this period. Composite Hearing Exhibit No. 7; Utilities Department Exhibit No. 3.

3. During the April 1997 through March 1998 period, coal suppliers delivered 16,384,031.95 tons of coal. The Commission Staff's audit of the Company's actual fuel procurement activities demonstrated that the average monthly cost of coal varied from \$33.55 per ton in October 1997 to \$35.00 per ton in September 1997. Composite Hearing Exhibit No. 6, Accounting Exhibit A.

4. Staff collected and reviewed certain generation statistics of major Company plants for the twelve months ending March 31, 1998. Composite Hearing

Exhibit No. 7, Utilities Department Exhibit No. 4. The nuclear fueled Catawba Plant was lowest cost at 0.43 cents per kilowatt-hour. The highest amount of generation was 17,854,244 megawatt-hours produced at the nuclear fueled Catawba Plant.

5. The Commission Staff conducted an extensive review and audit of the Company's fuel purchasing practices and procedures for the subject period. The Staff's accounting witness, Jacqueline R. Cherry, testified that the Company's fuel costs were supported by the Company's books and records. Testimony of Cherry, Composite Hearing Exhibit No. 6; Accounting Department Exhibits.

6. The Commission recognizes that the approval of the currently effective methodology for recognition of the Company's fuel costs require the use of anticipated or projected costs of fuel. The Commission further recognizes the fact inherent in the utilization of a projected average fuel cost for the establishment of the fuel component in the Company's base rates that variations between the actual costs of fuel and projected costs of fuel would occur during the period and would likely exist at the conclusion of the period. S.C. Code Ann. §58-27-865 establishes a procedure whereby the difference between the recovery of fuel costs through base rates and the actual fuel costs incurred would be accounted for by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

7. The record of this proceeding indicates that the comparison of the Company's fuel revenues and expenses for the period April 1997 through March 1998 produces a cumulative under-recovery of \$1,956,794. Staff added the projected over-

recovery of \$3,072,130 for April 1998 and the projected over-recovery of \$713,757 for May 1998 to arrive at a cumulative over-recovery of \$1,829,093. Cherry testimony at 4.

8. The Company's cumulative under-recovery as of March 1998 and over-recovery as of May 1998 differs from Staff's. Staff's purchased power figures for June 1997 through September 1997 differ from the Company's figures. Staff's figures, per Staff's Report, reflect calculation adjustments made to Purchased Power Costs for the aforementioned months, based on Staff's review of Purchased Power invoices and system operation reports. Accordingly, the Commission accepts Staff's figures, and we will consider the over-recovery of \$1,829,093 along with the anticipated fuel costs for the period June 1, 1998 to May 31, 1999 for the purpose of determining the base costs for fuel in base rates effective June 1, 1998. Cherry testimony at 4.

9. The Company's projected average fuel expense for the June 1998 through May 1999 period is 1.0162 cents per kilowatt-hour. Composite Hearing Exhibit No. 2, Young Exhibit No. 6.

10. Company witness Steve Young, Vice President, Rates and Regulatory Affairs, proposes that the fuel component of 1.000 cent per kilowatt-hour be continued in base rates, effective June 1, 1998. Young Testimony at 9.

The exhibits of Staff witness A.R. Watts show that if the base fuel component remains at 1.000 cent per kilowatt-hour for this period, it will produce an estimated under-recovery of \$3,513,543. Composite Hearing Exhibit No. 7, Utilities Department Exhibit No. 10.

11. During the period under review, several outages occurred at the Company's nuclear plants. The Consumer Advocate challenged two specific outages at Oconee Units 2 and 3. The subject outages are described in the Commission Staff Report Composite Hearing Exhibit No. 7, Utilities Department Exhibit No. 2A as follows:

DUKE POWER COMPANY  
NUCLEAR UNIT OUTAGE REPORT  
APRIL 1, 1997 – MARCH 31, 1998

| <u>Unit</u> | <u>Date of Outage</u> | <u>Hours/Type</u> | <u>Reason for Outage<br/>and Corrective<br/>Action</u>   |
|-------------|-----------------------|-------------------|--|
| Oconee 2    | 4/22/97 – 5/24/97     | 770.5/F           | Non- isolatable<br>reactor coolant<br>system leak due to<br>crack in high<br>pressure injection<br>piping due to loose<br>thermal sleeve         |
| Oconee 3    | 5/2/97 – 6/1/97       | 734.2/F           | Inspection and<br>repair of high<br>pressure injection<br>piping thermal<br>sleeve and repair<br>two damaged high<br>pressure injection<br>pumps |

The Consumer Advocate utilized correspondence between Duke and the Nuclear Regulatory Commission (NRC) concerning the above outages to cross-examine Duke witness Young. The Duke and NRC documents were included in the record as Composite Hearing Exhibit No. 3. The Consumer Advocate proposed that the Commission disallow \$2,788,576 of additional fuel expenses due to the specific outages

described herein. The specific dollar amount was based on Hearing Exhibit No. 4 which is a Duke document provided in response to a Consumer Advocate interrogatory. The Consumer Advocate presented no witnesses.

12. Mr. Young testified that the Consumer Advocate raised an issue involving the failure of a thermal sleeve in the HPI (High Pressure Injection) system based on the Company's licensee event report (LER) to the NRC for Oconee Unit 2. LERs are written reports routinely filed with the NRC which describe certain plant conditions or events. LERs are used by the NRC Staff to develop a database on plant operations for tracking and trending. NUREG – 1022, Rev. 1, Sect. 1.2. This LER reported, in essence, an equipment failure that took place 23 years after initial operation. Mr. Young indicated that it is important that LERs be placed in the appropriate context in that they are written as a communication between NRC licensees such as Duke and the NRC with a focus toward prospective assurance of continuous improvement in ongoing health and safety issues at nuclear plants. Therefore, the reports are written with the perspective of 20-20 hindsight and elaborate on corrective actions rather than addressing all the facts as known at the time of the incident.

The subject LER focused on the Company's preventative maintenance program. Mr. Young testified that Duke made every reasonable effort to minimize the impact of a known equipment problem on its fuel costs. He based his opinion on the following undisputed facts: (1) The Oconee units came on line in 1973-1974. (2) The Crystal River nuclear unit owned by Florida Progress Corporation developed a thermal sleeve problem in the early 1980's. (3) Duke, based on the Crystal River experience, had the thermal

sleeves at Oconee inspected and replaced those sleeves that did not have adequate contact between the thermal sleeve and the inside diameter of the HPI nozzle. These inspections were done by the same vendor radiographers that performed the inspections at Crystal River. (4) Duke then met with the equipment vendors, Babcock and Wilcox (B&W) and the B&W owners group to assess the problem and develop appropriate augmented inspection procedures. B&W was the designer and supplier of the nuclear steam supply system for the Oconee and Crystal River nuclear units. The procedures, among other things, provided for the inspection techniques and frequency of inspections as well as the area to be inspected. (5) The inspections were carried out in accordance with the procedures under the guidance of B&W from 1983 to 1990. (6) In 1990, Duke began performing the inspections with qualified in-house personnel. (7) Also in 1990, a stress analysis beyond the scope of the augmented inspection procedures was performed and the cumulative usage was acceptable.<sup>1</sup> (8) Duke's radiography procedures (28 pages) and ultrasonic procedures (41 pages) were utilized for inspection of the subject piping.<sup>2</sup>

Mr. Young testified that metal fatigue attributable to thermal stress caused cracks in the HPI nozzle resulting in a leak from the reactor coolant system in April 1997. Mr. Young was very specific in stating that from 1982 to 1997, Duke had in place adequate, detailed inspection procedures, a rigorous schedule for conducting the inspections, and that it had conducted inspections consistent with industry practice. He also indicated that during the 1990 to 1997 period, Duke had looked at the right component, radiographed the right area, conducted inspections at the right frequency, used qualified radiographers

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<sup>1</sup> Composite Hearing Exhibit No. 3, September 25, 1997, Duke to NRC.

<sup>2</sup> Composite Hearing Exhibit No. 5.

and took quality radiographs which were properly preserved, and verified that the sleeve had not moved within the nozzle.

Mr. Young concluded his testimony by stating that the LER does not capture the above facts because the purpose of an LER is to provide information for prospective procedures, not for prudence review in fuel hearings which consider the facts existing at the time of the outage. While the LER document, as written, implied existing deficiencies, in reality, it was only after an event that occurred approximately twenty-three years after installation of the thermal sleeve that it became apparent that a more explicit procedure might have been warranted. Prospective procedures often involve improvement of past procedures following an examination of them.

13. The Commission Staff testified that they reviewed the Company's operation of its generating facilities, giving special attention to the nuclear plant operations. The Commission Staff looked at each plant outage by review of the Company reports and correspondence between the Company and the NRC concerning the outage which required reporting. The Staff then interviewed Company personnel to discuss each outage during the review period. The Staff testified that there were no situations which warranted the determination that the Company had acted unreasonably in operating its facilities and thereby causing its customers to be subject to paying higher fuel costs. When the Company's net capacity factor for the period is adjusted for reasonable refueling and other outages, the resulting net capacity factor exceeds the threshold of 92.5% required by statute to presume cost minimization. The major fossil units averaged over 90% availability for the majority of the period under review.



Testimony of Watts at 2, Composite Hearing Exhibit No. 7, Utilities Department Exhibit No. 1.

### **CONCLUSIONS OF LAW**

1. Pursuant to S.C. Code Ann. §58-27-865(B)(Supp. 1997), each electrical utility must submit to the Commission its estimates of fuel costs for the next twelve (12) months. Following an investigation of these estimates, and after a public hearing, the Commission directs each electrical utility “to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the Commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period.” Id.

2. As stated by the Supreme Court in Hamm v. South Carolina Public Service Commission, 291 S.C. 178, 352 S.E.2d 476, 478 (1987), S.C. Code Ann. §58-27-865(F) requires the Commission “to evaluate the conduct of the utility in making the decisions which resulted in the higher fuel costs. If the utility has acted unreasonably, and higher fuel costs are incurred as a result, the utility should not be permitted to pass along the higher fuel costs to its customers.” “[T]he rule does not require the utility to show that its conduct was free from human error; rather it must show it took reasonable steps to safeguard against error.” Id. at 478, citing Virginia Electric and Power Co. v. The Division of Consumer Council, 220 Va. 930, 265 S.E.2d 697 (1980). [Emphasis added]

3. The Commission recognizes that the Supreme Court has interpreted S.C. Code Ann. §58-27-865(F) to provide it with the authority to consider the electrical utility’s reliability of service, its economical generation mix, the generating experience of

comparable facilities, and its minimization of the total cost of providing service in determining whether or not a utility has engaged in prudent and reasonable decision making. Nucor Steel v. SCPSC, 310 S.C. 539, 426 S.E.2d 319 (1992). [Emphasis added]

4. Further, S.C. Code Ann. Section 58-27-865(F) (Supp. 1997) provides that:

[t]here shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system.... if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review. The calculation of the net capacity factor shall exclude reasonable outage time associated with reasonable refueling, reasonable maintenance, reasonable repair, and reasonable equipment replacement outages; the reasonable reduced power generation experienced by nuclear units as they approach a refueling outage; the reasonable reduced power generation experienced by nuclear units associated with bringing a unit back to full power after an outage, Nuclear Regulatory Commission required testing outages unless due to the unreasonable acts of the utility; outages found by the [C]ommission not to be within the reasonable control of the utility; and acts of God. The calculation also shall exclude reasonable reduced power operations resulting from the demand for electricity being less than the full power output of the utility's nuclear generation system. If the net capacity factor is below ninety-two and one-half percent after reflecting the above specified outage time, then the utility shall have the burden of demonstrating the reasonableness of its nuclear operations during the period under review.

5. At the hearing of this matter, the Consumer Advocate recommended a disallowance of a portion of Duke's fuel costs as imprudently incurred. This Commission has reviewed, in accordance with Hamm v. S.C. Public Service Commission, 309, S.C. 282, 422 S.E.2d 110 (1992), i) the Consumer Advocate's proposed disallowance, ii) all of the evidence of record in this docket, including Consumer Advocate's Composite Hearing Exhibits 3 and 4, iii) the operating efficiencies of the Company during the review period, and iv) Staff testimony and exhibits, and we

find that Duke has met the test of the applicable statute, S.C. Code Ann. §58-27-865. We have reviewed each outage and the sequence of events which led to each outage. We conclude that the outages were the result of equipment failure which through human error was not detected prior to the referenced incident despite Duke having taken every reasonable step to safeguard against error. We find that there were no acts of management which were imprudent or which subjected Duke's customers to incurring higher fuel costs. We note that the only testimonial evidence before us is that of Duke and the Commission Staff. Orally, the Consumer Advocate's counsel addressed Duke's outages. However, it has been the law in our State for over sixty (60) years that statements of alleged fact appearing only in the argument of counsel cannot be considered by a tribunal or court. McManus v. Bank of Greenwood, 171 S.C. 84, 171 S.E. 473 (1933). The vitality of McManus was reaffirmed by Shinn v. Kruel, 427 S.E.2d 695 (S.C. App. 1993) and Norton v. Opening Break of Aiken, Inc., 443 S.E.2d 406 (S.C. App. 1994). The Consumer Advocate attempted to build its case by introducing documents produced by Duke in response to an NRC inquiry into a pipe leak at Duke's Oconee Nuclear facility. However, these documents, referred to throughout Mr. Young's testimony as LERs, are nuclear specific documents, which according to the only evidence explaining them, are useful in Duke's ongoing obligation to find better and safer ways to operate its federally licensed nuclear plants.

The NRC has issued, and we take judicial notice of, policy statements and regulations promulgated by the NRC on this subject. In particular, we have relied on

“Possible Safety Impacts of Economic Performance Incentives: Final Policy Statement”

at 50 F.R. 33945 effective 7/24/91 which states in pertinent part:

The Commission is also concerned about State public utility commission ratemaking actions that might be interpreted as penalizing a utility for improving its own procedures or methods of operation. For example, where a State public utility commission observes that a utility has modified its procedures following an incident, infers from the utility's actions that the original procedures must have been inadequate, and then disallows certain costs on the basis of such assumed inadequacies, the utility will have a strong disincentive voluntarily to enhance or improve its operations and procedures in the future. Such State public utility commission action can discourage utilities from making needed improvements in procedures and operations and, thus, can be detrimental to the long-term safety of operation.

Federal regulations at 10 C.F.R. §50.72 and §50.73 provide for notification of the NRC of “reportable events” occurring at nuclear power plants. NRC regulatory guidance in NUREG – 1022 Rev. 1 published January 1998 addresses the use of filings submitted in accordance with these sections in anything other than NRC proceedings. In subsection 1.2 of NUREG – 1022 Rev. 1, the NRC specifically addressed the issue raised by the Consumer Advocate by stating:

The operational experience submitted in accordance with 10 CFR 50.72 and 50.73 is publicly available and has been used by other organizations in ways that are most often beneficial to nuclear safety. However, uses in areas that were unintended, such as in prudence hearings, in statistical presentations and comparisons of reporting rates without regard to or inclusion of a technical analysis of the safety significance of the events, can lead to unwarranted impressions of safety performance. In such uses, there has been a tendency to only count the number of reported events without assessing their individual safety significance. Such misuses could result in licensees adopting a more restrictive reporting threshold in order to reduce the number of reportable events, although the Commission's requirement for a low threshold has not changed. This can be counterproductive to the purpose of these rules.

Having set out the evidence presented to us, it becomes incumbent upon us as the trier of the facts [Hamm v. SCPSC, supra] to determine whether Duke's management acted prudently in managing its corporate assets, and in particular, operating its Oconee Nuclear Plant.

We find based on the foregoing evidence that there is substantial evidence to determine that Duke acted prudently in the management of its Company assets during the preceding twelve months. Accordingly, and based on the evidence of record, we find that Duke has met its burden of persuasion. In reaching this determination, we have concluded that the Consumer Advocate did not meet the burden of production necessary to overcome the rebuttable presumption of prudence on the part of Duke, once it was established that it had achieved a net capacity factor of 92.5% or higher during the period under review. S.C. Code Ann. §58-27-865(F) (Supp. 1997). While our appellate courts have not interpreted this particular portion of this statute for us, they have interpreted a similar presumption with regard to rate cases which we have relied on in interpreting the statutory language applicable here. In Hamm v. SCPSC, supra, page 112, the Supreme Court of South Carolina held that a presumption of reasonable expenditure on behalf of a utility does not shift the burden of persuasion but rather "... shifts the burden of production on to the Commission or other contesting party to demonstrate a tenable basis for raising the specter of imprudence." This burden of production may be met by the Consumer Advocate through the use of the liberal discovery provisions of §37-6-605 S.C. Code Ann. (Supp. 1997). However, it is our belief as trier of fact in this matter that the Consumer Advocate's production of the LERs and related documents was not sufficient

to provide a tenable basis for establishing imprudence on the part of Duke's management. Furthermore, even if the Consumer Advocate did meet its burden of production, we don't find it to be persuasive. Any questions raised by the documents, primarily LERs introduced by the Consumer Advocate, were more than adequately answered by the prefiled testimony introduced by the Commission Staff and Duke as well as the testimony given by Duke witness Young at the hearing.

As previously stated hereinabove, the oral statements of the Consumer Advocate's counsel are not evidence and may not be considered by this Commission. The Consumer Advocate presented no witnesses and therefore the testimony of Duke witness Young and his explanation of the appropriate use of the LERs is the only testimony on this subject before this Commission. A review of the cross-examination of Duke witness Young and Staff witness Watts does not reveal that the Consumer Advocate's counsel established any facts to support her concerns about the Duke outages. In fact, Duke witness Young repeatedly declined to agree with the Consumer Advocate's counsel's characterizations of the evidence before this Commission.

Therefore, we find that Duke has acted prudently in operating its plants during the year in review and no disallowance of fuel costs during the review period is justified. We further find that Duke took reasonable steps to safeguard against error and to minimize the total costs of providing service. See prefiled testimony of Watts at 2, Young at 6-7 and hearing testimony. We find that the Company's net capacity factor for the review period, adjusted for reasonable refueling and other outages, exceeds the ninety-two and one-half percent threshold required by the Statute.

6. This Commission is exercising its discretion in this matter in acknowledgement of the well-established fact that the Commission is, “[g]enerally given a wide range of discretion in utility rate cases....” Hamm v. South Carolina Public Service Commission, 298 S.C. 309, 380 S.E.2d 428 (1989). That is, in applying the statutes governing utility regulation, which are the Commission’s sole source of authority, the Commission is given great discretion. The rule of construing statutes in pari materia indicates that the Commission is similarly entitled to great discretion in applying Section 58-27-865. Spartanburg County v. Arthur, 180 S.C. 81, 185 S.E. 486 (1936). It is logical to assume that the Legislature intended to grant this Commission, “a wide range of discretion” in all matters of utility regulation, including utility fuel proceedings.

7. After considering the directives of S.C. Code Ann. Section 58-27-865(B) and (G) which require the Commission to place in effect a base fuel cost which allows the Company to recover its fuel costs for the next twelve months adjusted for the over-recovery or under-recovery from the preceding twelve month period in a manner which assures public confidence and minimizes abrupt changes in charges, the Commission has determined that the appropriate base fuel factor for the period June 1, 1998 through May 31, 1999 is 1.000 cent per kilowatt-hour. The Commission finds that a 1.000 cent per kilowatt-hour fuel component will allow Duke to recover its projected fuel costs and, at the same time, prevent abrupt changes in charges to Duke’s customers.

IT IS THEREFORE ORDERED THAT:

1. The base fuel factor for the period June 1998 through May 1999 is set at 1.000 cent per kilowatt-hour.

2. Duke shall file an original and ten (10) copies of the fuel rider within ten (10) days of the receipt of this Order.

3. Duke shall comply with the notice requirements set forth in S.C. Code Ann. Section 58-27-865(B) (Supp. 1997).

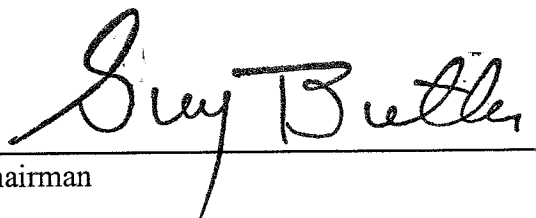
4. Duke shall continue to file the monthly reports as previously required.

5. Duke shall account monthly to the Commission for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

6. Duke shall submit monthly reports to the Commission of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 MW or greater.

7. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

  
Chairman

ATTEST:

  
 Executive Director

(SEAL)



**Commissioner Warren D. Arthur, IV, dissenting:**

While I agree with the majority regarding the appropriate fuel factor for Duke for the next twelve-month period, for the reasons set forth below I would have disallowed recovery of fuel costs in the amount of \$2,788,576.

S.C. Code Ann. §58-27-865 (Supp. 1997) provides in part that “the [C]ommission shall disallow recovery of fuel costs that it finds without just cause to be the result of failure of the utility to make every reasonable effort to minimize fuel costs or any decision of the utility resulting in unreasonable fuel costs ...” The statute also provides that the Commission shall give “due regard to reliability of service, economical generation mix, generating experience of comparable facilities, and minimization of the total cost of providing service.” S.C. Code Ann. Section 58-27-865(F) (Supp. 1997). S.C. Code Ann. §58-27-865 further provides that “[t]here shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system, as applicable, if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review.”

The statute states that if an electrical utility achieves a 92.5% capacity factor then there is a rebuttable presumption that the electrical utility made every reasonable effort to minimize costs. As the statute creates a rebuttable presumption, the 92.5% capacity factor is not a guarantee. If a party to the proceeding presents evidence that the utility acted unwisely or imprudently, then the presumption associated with the 92.5% net capacity factor may be negated.

In the case before this Commission, the Consumer Advocate presented, in my opinion, compelling evidence which should result in the disallowance of certain fuel costs associated with outages at Oconee Nuclear Station Unit 2 occurring April 22 -- May 24, 1997, and at Oconee Nuclear Station Unit 3, occurring May 2 -- June 1, 1997. As a result of these outages, the Nuclear Regulatory Commission ("NRC") conducted an investigation of the outages. The NRC inspectors concluded that the causes of the leak that resulted in the outages at Oconee 2 and 3 were (1) inadequate implementation of augmented inspections for cracks in HPI lines and (2) inadequate evaluation and correction of known problems. (Emphasis added.) After inspections and an enforcement conference, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalties. The NRC expressed concern "that the April 21, 1997, event involved a known failure mode and that the program designed to detect precursors to such leaks was ineffective." (Emphasis added.) Hearing Exhibit No. 3, Notice of Violation and Proposed Imposition of Civil Penalties - \$330,000, at 3. The NRC further stated that "the failure to pursue indications of thermal stratification in the HPI lines is an additional indicator of programmatic deficiencies." Id. The NRC found violations "to involve particularly poor licensee performance" and "specifically, the violations (1) affected all three units; (2) involved a known failure mode; (3) involved a significant failure to implement an inspection program intended to identify the failure mode; and (4) resulted in an unisolable reactor coolant leak which was clearly preventable." Id. at 3-4. The result of the NRC's investigation was that the NRC fined Duke \$220,000, which is twice the maximum of a Severity level II violation, and \$110,000 which is twice the base civil

penalty of a Severity Level III violation. (Emphasis added.) Id. at 2-4. The NRC stated that the fine of \$220,000 (double the maximum fine) was to “appropriately reflect the safety and regulatory significance of the violation.” Id. at 2.

Duke’s own investigation led Duke to conclude that the root causes of the event were (1) “failure to implement an effective HPI nozzle inspection program based on available industry recommendations”; and (2) “failure to effectively evaluate known problems (industry and in-house experience) and implement appropriate corrective actions (during a period of 1982 through the present).” (Emphasis added) Hearing Exhibit No. 3, Duke Licensee Event Report 270/97091, pp. 8-9 of 13. Additionally, Duke acknowledged in its reply to the Notice of Violation and Proposed Imposition of Civil Penalty that there was a breakdown in its HPI System augmented inspection program. Both the NRC and Duke concluded that Duke failed to put recommended procedures in place after being warned of a known problem.

In my opinion, the failure of Duke to take heed of a known problem with the High Pressure Injection Nozzles and to implement recommended procedures for detecting a problem was unreasonable and as a result of Duke’s actions, or perhaps more correctly as a result of Duke’s inactions, the outages of the Oconee 2 and Oconee 3 reactors occurred. I believe that it is the duty of this Commission to uphold the intent of the statute and to protect the ratepayers by carefully scrutinizing and reviewing the actions of the utility. While Duke is clearly one of the best utilities in the country, I do not believe that Duke acted reasonably in this case, and therefore I cannot in good conscience vote to approve the fuel costs associated with these outages.

I am also concerned about Staff's failure to investigate the outages. The majority notes that the Consumer Advocate did not present a witness to testify about the outages and that she attempted to build her case by introducing documents produced by Duke in response to the inquiry by the NRC. The majority also notes that a review of the cross-examination of the Duke witness and the Staff witness does not establish any facts to support the Consumer Advocate's concerns about the outages. Staff did not investigate the outages because the net capacity factor for Duke was above the 92.5% as specified in S.C. Code §58-27-865 (Supp. 1997). Staff erroneously believed that if the Company achieved a 92.5% net capacity factor for the review period the presumption that the utility made every reasonable effort to minimize fuel costs would stand. Therefore, the Staff did not investigate the outages. As Staff failed to investigate the outages, there can be nothing in Staff's testimony which would either support or discredit the Company's testimony concerning the outages. We are then left with the evidence of the documents from the NRC and Duke itself to make the determination whether the Company's actions were prudent. Unlike that of the majority, it is my opinion that the documents presented by the Consumer Advocate have sufficient weight to question the prudence of Duke's actions and decisions. I would resolve that question in favor of the consumers and would disallow the fuel costs associated with the outages.

As a result of Duke's failure to act on a known problem, these outages occurred. Since Duke had notice of the potential problem and failed to put recommended procedures in place to prevent a problem from occurring, I believe that Duke acted unreasonably and that replacement fuel costs associated with the outages should be

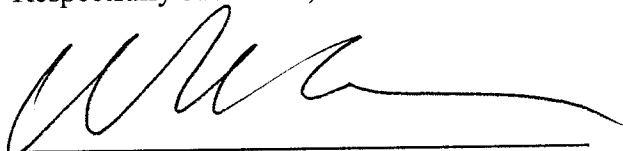
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disallowed. I would therefore vote to disallow the replacement fuel costs of \$1,428,018 for the Oconee 2 outage and \$1,360,558 for the Oconee 3 outage, for a total of \$2,788,576.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Arthur', followed by a long horizontal line extending to the right.

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Warren D. Arthur, IV  
Commissioner, Sixth District